

8.1 Prior to Electronic Bonding Interface (EBI), Sprint will refer repair calls to the SWBT LSPC by telephone. After implementation of EBI, Sprint may from time to time call the SWBT LSPC. In either event, the following will apply: The SWBT LSPC will answer its telephone and begin taking information from Sprint at the same level of service as provided to SWBT's customers when calling the Customer Service Bureau ("CSB").

8.2 The SWBT LSPC will be on-line and operational twenty-four (24) hours per day, seven (7) days per week and will handle Sprint calls as well as other LSP calls in a non-discriminatory manner.

The EBI to be established pursuant to Section 3 preceding shall be on-line and operational twenty-four (24) hours per day, seven (7) days per week except for the scheduled maintenance downtime as documented in the SWBT & Sprint Joint Implementation Agreement for the Electronic Bonding Project to be developed.

8.3 While in manual mode operation, SWBT will provide Sprint "estimated time to restore." The status of all other tickets will be given to the Sprint CNSC through the fax of a daily log (faxed the next morning to the Sprint CNSC by 8 a.m. Central Time Zone) and will include all "closed tickets" from the previous day (including No Access and closed troubles).

Sprint may utilize the Customer Network Administration (CNA) or the EBI to obtain the status of open and closed trouble reports in a mechanized method instead of the above manual method.

8.4 Notice of emergency network outages, as defined in this Attachment, will be provided to the Sprint NMC within one (1) hour.

8.5 For network outages other than emergency outages, the following performance measurements will be taken with respect to restoration of Unbundled Network Elements service:

a) speed of answer in the LSPC -

Note: Comparison will be made against the results for speed of answer in SWBT's CSBs (where SWBT's customers call in to refer troubles directly);

b) percent missed commitments for nondesigned services;

c) average outage duration time: nondesigned — receipt to clear;
designed — mean time to repair;

d) percent right the first time: nondesigned — 10 days;

designed — 30 days;

- e) percent report rate - nondesigned -
Note: Comparison will be applicable only after Sprint's customer base equals or exceeds 300,000 lines;
- f) percent no access - nondesigned.

The above performance measurements will be measured and reported to Sprint on a monthly basis by SWBT for both Sprint customers, SWBT customers, and total LSP customers. If the quality of service provided by SWBT to Sprint based on these measurements is less than that provided to SWBT customers and other LSPs for three consecutive months, or if the average quality of service for a six month period is less than that provided to SWBT customers, Sprint may request a service improvement meeting with SWBT.

- 8.6 For purposes of this Section, service through an Unbundled Network Element is considered restored or a trouble resolved when the quality of Unbundled Network Element service is equal to that provided before the outage or the trouble occurred.

9. Escalation Procedures

- 9.1 SWBT will provide Sprint with written escalation procedures for maintenance resolution to be followed if, in Sprint's judgment, any individual trouble ticket or tickets are not resolved in a timely manner. The escalation procedures to be provided hereunder shall include names and telephone numbers of SWBT management personnel who are responsible for maintenance issues. Sprint acknowledges that the procedures set forth in SWBT's LSPC POTS Escalation/ Expedite Maintenance Procedures dated May 6, 1996, and LSPC escalation contact list meet the requirements of this Section.

10. Premises Visit Procedures

- 10.1 SWBT Maintenance of Service Charges, when applicable, will be billed by SWBT to Sprint, and not to Sprint's end-user customers.
- 10.2 Dispatching of SWBT technicians to Sprint Customer premises shall be accomplished by SWBT pursuant to a request received from Sprint.
- 10.3 When a SWBT employee visits the premises of an Sprint local customer, the SWBT employee must inform the customer that he or she is there acting on behalf of the customer's "local service provider". Materials left at the customer premises (e.g., a door hanger notifying the customer of the service visit) must also inform the customer that SWBT was on their premises acting on behalf of the customer's "local service provider".

- 10.4 If a trouble cannot be cleared without access to Sprint's local customer's premises and the customer is not at home, the SWBT technician will leave at the customer's premises a non-branded "no access" card requesting the customer to call the customer's "local service provider" for rescheduling of repair.
- 11. Testing
 - 11.1 All Unbundled Network Elements troubles determined not to be enduser customer related or in Sprint's provided network facilities will be reported by Sprint to SWBT. Upon receipt of a trouble report on Unbundled Network Element(s), SWBT will test and sectionalize all elements purchased from (or provided by) SWBT at no additional charge for standard tests. If SWBT determines that a trouble is isolated or sectionalized in network facilities provided by Sprint, then SWBT will refer the trouble ticket back to the Sprint customer network service center (CNSC) for handling.
 - 11.2 SWBT and Sprint agree to develop a mutually acceptable Work Center Operational Understanding document to establish methods and procedures to define the exchange of information between SWBT and Sprint under which they will work together.

ATTACHMENT 9: BILLING - OTHER

1.0 Introduction

- 1.1 This Section describes the requirements for the Parties to bill all charges the Parties incurred other than those addressed in Attachment 4: Connectivity Billing - Resale.
- 1.2 Charges for the relevant services provided under this Attachment are included in Appendix Pricing-UNE to Attachment 6.

2.0 Billing Information and Charges for UNE

- 2.1 SWBT will bill in accordance with this Agreement those charges Sprint incurs as a result of Sprint purchasing from SWBT Unbundled Elements as set forth in Attachment 6. Each bill will be formatted in accordance with CABS or as applicable in accordance with EDI for Resale services. Each Billing Account Number (BAN) will be sufficient to enable Sprint to identify the Unbundled Element ordered by Sprint to which charges apply. Each bill will include a Customer Service Record (CSR) and will set forth the quantity and description of each Unbundled Element provided to Sprint.
- 2.2 SWBT will provide Sprint a monthly bill for unbundled network elements, separate from a bill for resold services, that includes all charges incurred by and credits and/or adjustments due to Sprint for those Unbundled Elements, ordered, established, utilized, discontinued or performed pursuant to this Agreement. Each bill provided by SWBT to Sprint will include: (1) all non-usage sensitive charges incurred for the period beginning with the day after the current bill date and extending to, and including, the next bill date, (2) any known unbilled non-usage sensitive charges for prior periods, (3) unbilled usage sensitive charges for the period beginning with the last bill date and extending up to, but not including, the current bill date, (4) any known unbilled usage sensitive charges for prior periods, and (5) any known unbilled adjustments and (6) any Customer Service Record (CSR) for all recurring flat-rated charges.
- 2.3 The Bill Date, as defined herein, must be present on each bill transmitted by SWBT to Sprint. Bills will not be rendered for any Charges which are incurred under this Agreement on or before one (1) year preceding the Bill Date. In addition, on each bill where "Jurisdiction" is identified, local and local toll charges will be identified as "Local" and not as interstate, interstate/ interLATA, intrastate, or intrastate/intraLATA.

- 2.4 Each Party will provide the other Party at no additional charge a contact person for the handling of any billing questions or problems that may arise during the implementation and performance of the terms and conditions of this Attachment.

3.0 **Issuance of UNE Bills**

- 3.1 SWBT will issue all bills in accordance with the terms and conditions set forth in this Section. SWBT will establish monthly billing dates (Bill Date) for each BAN, as further defined in the CABS documents and EDI/BOS document (e.g. AIN), which Bill Date will be the same day month to month. Each BAN will remain constant from month to month, unless changed as agreed to by the Parties. SWBT will provide Sprint at least thirty (30) calendar days written notice prior to changing, adding or deleting a BAN. SWBT will provide one invoice associated with each BAN. All bills must be received by Sprint no later than ten (10) calendar days from Bill Date and at least twenty (20) calendar days prior to the payment due date (as described in this Attachment), whichever is earlier. Any bill received on a Saturday, Sunday or a day designated as a holiday by the Chase Manhattan Bank of New York (or such other bank as the Parties may agree) will be deemed received the next business day. If either Party fails to receive billing data and information within the time period specified above, the payment due date will be extended by the number of days the bill is late
- 3.2 SWBT will issue all bills containing billing data and information in accordance with CABS Version 26.0 with exceptions noted in the Differences List, or such later versions of CABS as are published by Bellcore, or its successor, and as further described in Sprint's publication, Unbundled Network Elements Interconnections Interface Requirements, (Sept. 19, 1996) (hereafter Sprint UNE Interface Specifications). To the extent that there are no CABS standards governing the formatting of certain data, such data will be issued in the format agreed by the Parties by February 1, 1997. _
- 3.3 To avoid transmission failures or the receipt of billing information that cannot be processed, the Parties will provide each other with their respective process specifications and edit requirements. Sprint will provide SWBT reasonable (within 24 hours) notice if a billing transmission is received that does not meet the specifications in this Attachment. Such transmission will be corrected and resubmitted to Sprint, at SWBT's sole expense, in a form that meets the specifications. The payment due date for such resubmitted transmissions will be twenty (20) days from the date that the transmission is received in a form that can be processed and that meets the specifications set forth in this Attachment.

4.0 **Electronic Transmissions**

- 4.1 SWBT will transmit billing information and data in the appropriate CABS format or EDI format electronically via Connect:Direct (formerly known as Network Data Mover) to Sprint at the location specified by Sprint. The Parties agree that a T1.5 or 56kb circuit to Gateway for Connect:Direct is required. Sprint data centers will be responsible for originating the calls for data transmission via switched 56kb or T1.5 lines. If SWBT has an established Connect:Direct link with Sprint, that link can be used for data transmission if the location and applications are the same for the existing link. Otherwise, a new link for data transmission must be established. SWBT must provide Sprint/Alpharetta its Connect:Direct Node ID and corresponding VTAM APPL ID before the first transmission of data via Connect:Direct. Sprint's Connect:Direct Node ID is "NDMATTA4" and VTAM APPL ID is "NDMATTA4" and must be included in SWBT's Connect:Direct software. Sprint will supply to SWBT its RACF ID and password before the first transmission of data via Connect:Direct. Any changes to either Party's Connect:Direct Node ID must be sent to the other Party no later than twenty-one (21) calendar days before the changes take effect.
- 4.2 The following dataset format will be used as applicable for those charges transmitted via Connect:Direct in CABS format:

Production Dataset

AF25.AXXXXYYY.AZZZ.DDDEE	Production Dataset Name
AF25 =	Job Naming Convention
AXXXX =	Numeric Company Code
YYY =	SWBT Remote
AZZZ =	RAO (Revenue Accounting Office)
DDD =	BDT (Billing Data Tape with or without CSR) Or CSR (Customer Service Record)
EE =	01 thru 31 (Bill Period) (optional) or GA (US Postal-State Code)

Test Dataset

AF25.ATEST.AXXXX.DDD	Test Dataset Name
AF25.ATEST =	Job Naming Convention
AXXXX =	Numeric Company Code
DDD =	BDT (Billing Data Tape with or without CSR) Or CSR (Customer Service Record)

5.0 Tape or Paper Transmissions

- 5.1 In the event either Party does not have Connect:Direct capabilities upon the effective date of this Agreement, such Party agrees to establish Connect:Direct transmission capabilities with the other Party within the time period mutually agreed and at the establishing Party's expense. Until such time, the Parties will transmit billing information to each other via magnetic tape or paper (as agreed to by Sprint and SWBT). Billing information and data contained on magnetic tapes or paper for payment will be sent to the Parties at the locations designated by each Party. The Parties acknowledge that all tapes transmitted to the other Party via US Mail or Overnight Delivery and which contain billing data will not be returned to the sending Party.

6.0 Testing Requirements

- 6.1 At least 90 days prior to changing transmission mediums (e.g., from paper to mechanized), SWBT will send bill data in the appropriate mechanized format (i.e. CABS or EDI) for testing to ensure that the bills can be processed and that the bills comply with the requirements of this Attachment. The Parties will mutually agree to develop a testing process to ensure the accurate transmission of the bill. SWBT agrees that it will not send bill data in the new mechanized such bill data has met the agreed testing specifications as developed.
- 6.2 SWBT will send bill data in the appropriate mechanized format (i.e. CABS or EDI) for testing to ensure that bills can be processed and that bills comply with the requirements of this Attachment. After receipt of the test data Sprint will notify SWBT if the billing transmission meets testing specifications. If the transmission fails to meet the agreed testing specifications, SWBT will make the necessary corrections. At least three (3) sets of testing data must meet the mutually agreed testing specifications prior to SWBT sending a mechanized production bill for the first time via electronic transmission. Thereafter, SWBT may begin sending Sprint mechanized production bills on the next Bill Date, or within ten (10) days, whichever is later.

7.0 Additional Requirements

- 7.1 If SWBT transmits data in a mechanized format, SWBT will comply with the following specifications which are not contained in CABS or EDI/BOS guidelines but which are necessary for Sprint to process billing information and data:
- (1) The BAN will not contain embedded spaces or low values.
 - (2) The Bill Date will not contain spaces or non-numeric values.
 - (3) Each bill must contain at least one detail record.
 - (4) Any "From" Date should be less than the associated "Thru" Date and neither date can contain spaces.

8.0 Bill Accuracy Certification

- 8.1 The Parties agree that in order to ensure the proper performance and integrity of the entire billing process, SWBT will be responsible and accountable for transmitting to Sprint an accurate and current bill. For the purposes of this Agreement, Sprint and SWBT will develop the processes and methodologies required for Unbundled Network Elements bill certification by December 31, 1997, unless otherwise mutually agreed. –

9.0 Payment of Charges

- 9.1 Subject to the terms of this Agreement, Sprint will pay all charges within thirty (30) calendar days from the Bill Date. If the payment due date is a Sunday or is a Monday that has been designated a bank holiday by the Chase Manhattan Bank of New York (or such other bank as the Parties agree), payment will be made the next business day. If the payment due date is a Saturday or is on a Tuesday, Wednesday, Thursday or Friday that has been designated a bank holiday by the Chase Manhattan Bank of New York (or such other bank as the Parties agree), payment will be made on the preceding business day.
- 9.2 Payments will be made in US Dollars via electronic funds transfer (EFT) to SWBT's bank account. At least thirty (30) days prior to the first transmission of billing data and information for payment, SWBT will provide the name and address of its bank, its account and routing number and to whom billing payments should be made payable. If such banking information changes, each Party will provide the other Party at least sixty (60) days written notice of the change and such notice will include the new banking information. SWBT desires electronically transferred funds and remittances via automated clearinghouse (ACH) standard EDI transaction sets. Sprint agrees to provide such automated remittances if and when Sprint develops such capability. Sprint will provide SWBT with one address to which such payments will be rendered and SWBT will provide Sprint with one address to which such payments will be rendered. In the event Sprint receives multiple and/or other bills from SWBT which are payable on the same date, Sprint may remit one payment for the sum of all such bills payable to SWBT's bank account specified in this subsection and Sprint will provide SWBT with a payment advice. Each Party will provide the other Party with a contact person for the handling of billing payment questions or problems.

10.0 Examination of Records

- 10.1 Without waiver of and in addition to the Audit rights in the General part of this Agreement, upon reasonable notice and at reasonable times and in accordance with the Certification Agreement mutually developed out of Section 8 to this Attachment, Sprint or its authorized representatives may examine SWBT's documents, systems, records and procedures which relate to the billing of the charges under this Attachment

11.0 Meet Point Billing

- 11.1 Sprint and SWBT will establish and maintain meet-point billing (MPB) arrangements in accordance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents, except as modified herein. Each Party will maintain provisions in its respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff to reflect the MPB arrangements identified in this Agreement, including MPB percentages.
- 11.2 Sprint and SWBT will implement the Multiple Bill/Single Tariff option. As described in the MECAB document, each Party will render a bill in accordance with its own tariff for that portion of the service it provides.
- 11.3 In the case of tandem routing, the tandem company will provide to the end office company the billing name, billing address, and carrier identification code (CIC) of the Interexchange Carriers (IXCs) in order to comply with the MPB Notification process as outlined in the MECAB document. Such information will be provided, on a one time basis, in the format and via the medium that the Parties agree. In the event that the end office company is unable to ascertain the IXC to be billed, the tandem company will work with the end office company to identify the proper entity to be billed.
- 11.4 SWBT and Sprint will record and transmit MPB information in accordance with the standards and in the format set forth in this Attachment. SWBT and Sprint will coordinate and exchange the billing account reference (BAR) and billing account cross reference (BACR) numbers for the MPB arrangements described in this Agreement. Each Party will notify the other if the level of billing or other BAR/BACR elements change, resulting in a new BAR/BACR number.
- 11.5 Each Party will provide access usage records to the other Party within ten (10) business days of the recording. The IBC will provide the summary usage records (SURs) to the subsequent billing company within ten (10) business days of sending IBC bills to the IXC.
- 11.6 Each Party agrees to provide the other Party with notification of any discovered errors within ten (10) business days of the discovery. The appropriate Party will correct the error within ninety (90) calendar days of notification and resubmit the data. In the event the errors cannot be corrected within the time period specified above, the erroneous data will be considered lost.
- 11.7 Both Parties will provide the other a single point of contact to handle any MPB questions and will not charge for billing inquiries.
- 11.8 The Parties will work cooperatively to establish a method of recording for purposes of MPB in a facilities based environment not later than January 1, 1997.
- 12.0 **Mutual Compensation**

- 12.1 The Parties will bill each other reciprocal compensation in accordance with the standards set forth in this Agreement at Attachment 12: Compensation.
- 12.2 Billing for mutual compensation will be in accordance with the Primary Toll Carrier (PTC) billing process. If SWBT migrates to a CABS-like billing system, such data will be issued in a CABS-like format.

ATTACHMENT 10: PROVISION OF CUSTOMER USAGE DATA-
UNBUNDLED NETWORK ELEMENTS

1. Introduction (Unbundled Elements)

- 1.1 This Attachment 10: Provision of Customer Usage Data-Unbundled Network Elements sets forth the terms and conditions for SWBT's provision of usage data (as defined in this Attachment) to Sprint. Usage Data will be provided by SWBT to Sprint when Sprint purchases Network Elements, from SWBT.
- 1.2 Charges for the relevant services provided under this Attachment are included in Appendix Pricing-UNE to Attachment 6.

2. General Requirements for Usage Data

- 2.1 SWBT's provision of Usage Data to Sprint will be in accordance with Performance Metrics to be developed by Sprint and SWBT during and as part of the implementation and testing process. SWBT's performance based on such Performance Metrics will begin to be measured and reported at the time Sprint begins providing local service to customers, but SWBT's provision of Usage Data will not be required to meet such Performance Metrics until six months after Sprint begins providing local services to customers.
- 2.2 SWBT will retain Usage Data in accordance with Sprint Usage Requirements, January 1997 (Data Requirements), subject to applicable laws and regulations.

3. Usage Data Specifications

- 3.1 SWBT will provide all usage data for Sprint's customers using the SWBT-provided Network Element(s). Usage Data includes, but is not limited to, the following categories of information:
- completed calls
 - use of CLASS/LASS/Custom Features
 - calls to information providers reached via SWBT facilities and contracted by SWBT
 - calls to directory assistance where SWBT provides such service to an Sprint customer

- calls completed via SWBT-provided operator services where SWBT provides such service to Sprint's Local service customer
 - records will include complete call detail and complete timing information for Unbundled Network Elements
- SWBT will provide usage data for completed calls only for elements that SWBT records (e.g. unbundled local switching, but not loops).

3.2 SWBT will provide to Sprint Usage Data for Sprint end user customers only. SWBT will not submit other carrier local usage data as part of the Sprint Usage Data.

3.3. If Sprint purchases SWBT's unbundled local switching, SWBT agrees to block 900 calls per Sprint's request.

4. Usage Data Format

4.1 SWBT will provide Usage Data in the BellCore Exchange Message Record (EMR) format and by category, group and record type, as specified in the Sprint Customer Usage Data Transfer Requirements, March 1996 ("Data Requirements"), or as otherwise agreed to by the Parties.

4.2 SWBT will include the Working Telephone Number (WTN) of the call originator on each EMR call record.

4.3 End user customer usage records and station level detail records will be in packs in accordance with EMR standards.

5. Usage Data Reporting Requirements

5.1 SWBT will segregate and organize the Usage Data in a manner agreeable to both parties. SWBT will provide segregated Usage Data to Sprint locations as agreed to by the Parties.

5.2 SWBT will transmit formatted Usage Data to Sprint over Network Data Mover Network using CONNECT:Direct protocol, or otherwise agreed to by the Parties.

5.3 Sprint and SWBT will test and certify the CONNECT:Direct interface to ensure the accurate transmission of Usage Data

- 5.4 SWBT will provide Usage Data to Sprint daily (Monday through Friday) on a daily time schedule to be determined by the parties.
- 5.5 SWBT will establish a single point of contact to respond to Sprint call usage, data error, and record transmission inquiries.
- 5.6 The Usage Data EMR format, content, and transmission process will be tested no later than April 1, 1997 or otherwise as mutually agreed by both parties.

6 Charges

- 6.1 Loss of Recorded Usage Data - If Sprint Recorded Usage Data is determined to have been lost, damaged or destroyed as a result of an error or omission by SWBT and the data cannot be recovered by SWBT, SWBT will not bill Sprint for such usage.
- 6.2 SWBT will bill and Sprint will pay the charges set forth in this Agreement. Billing and payment will be in accordance with the applicable terms and conditions set forth in this Agreement.

7.1 Local Disconnect Report

- 7.1 When Sprint purchases certain Network Elements from SWBT, SWBT will provide Sprint with Local Disconnect Report. When SWBT is acting as the switch provider for Sprint, where Sprint is or employing UNEs to provide local service, SWBT will notify Sprint whenever the local service customer disconnects switch port (e.g. WTN) service from Sprint to another local service provider. SWBT will provide this notification via a mutually agreeable 4 digit Local Use Transaction Code Status Indicator (TCSI) that will indicate the retail customer is terminating local service with Sprint. SWBT will transmit the notification, via the Network Data Mover Network using the CONNECT:direct protocol, within five (5) days of SWBT reprovisioning the switch. The TCSI, sent by SWBT, will be in the 960 byte industry standard CARE record format.
- 7.2 SWBT will accept account changes that affect only the pre-subscribed intraLATA and/or interLATA toll provider (PIC) through the following procedure: SWBT will accept an LD "PIC Only" Change via the Service Order feed to provision the LD change in SWBT's network. SWBT will convey the confirmation of the "PIC Only" change via the Work Order Completion feed. In addition, SWBT will reject, via the industry standard CARE Record 3148, any Interexchange Carrier initiated change of the Primary Interexchange Carrier (PIC), where SWBT is the switch provider

either for the retail local services of SWBT that Sprint resellers or UNEs of SWBT that Sprint employs in providing service.

- 7.3 These procedures are in addition to Service Order Procedures set forth in Attachment 7: Ordering and Provisioning - UNE. SWBT will meet the Local Disconnect Report requirements set out in SWBT's Local Disconnect Requirements (December 1996), as updated or as the Parties may otherwise agree.

8. Alternatively Billed Calls

- 8.1 Calls that are placed using the services of SWBT or another LEC or LSP and billed to an Unbundled Network Element (e.g. switch port) of Sprint are called "incollect." Calls that are placed using Sprint network element (e.g. switch port) and billed to a SWBT line or other LEC or LSP are called "Outcollects."
- 8.2 Outcollects: SWBT will provide to Sprint the unrated message detail that originates from an Sprint subscriber line but which is billed to a telephone number other than the originating number (e.g., calling card, bill-to-third number, etc.). SWBT has agreed to transmit such data on a daily basis. Sprint as the Local Service Provider (LSP) will be deemed the earning company and will be responsible for rating the message at Sprint tariffed rates and Sprint will be responsible for providing the billing message detail to the billing company for end user billing. Sprint will be compensated by the billing company for the revenue it is due. A message charge for SWBT's transmission of Outcollect messages to Sprint is applicable, and SWBT will bill Sprint for the transmission charge.
- 8.3 Incollects: For messages that originate from a number other than the billing number and that are billable to Sprint customers (Incollects), SWBT will provide the rated messages it receives from the CMDS1 network or which SWBT records (Non-ICS) to Sprint for billing to Sprint's end-users. SWBT will transmit such data on a daily basis. SWBT will credit Sprint the Billing and Collection (B&C) fee for billing the Incollects. The B&C credit will be provided in accordance with the procedures set forth in Attachment 4: Connectivity Billing-Resale of the Agreement and the credit will be \$.05 per billed message. Sprint and SWBT have stipulated that a per message charge for SWBT's transmission of Incollect messages to Sprint is applicable, and SWBT will bill Sprint for the transmission charge.

ATTACHMENT 11: NETWORK INTERCONNECTION ARCHITECTURE

This Attachment 11: Network Interconnection Architecture to the Agreement describes the technical arrangement by which Sprint and SWBT will interconnect their networks in the event that Sprint is providing its own switching facilities in a given Exchange Area. The arrangements described herein do not apply to the provision and utilization of Unbundled Network Elements which are addressed in Attachment 6: Unbundled Network Elements.

1. The Parties will interconnect their facilities as follows:
 - 1.1 In each SWBT Exchange Area in which Sprint offers local exchange service, the Parties will interconnect their network facilities at a minimum of one mutually agreeable Point of Interconnection (POI). Each party will be responsible for providing necessary equipment and facilities on their side of the POI. If Sprint establishes collocation at an end office, any direct trunks will be provisioned over the Sprint collocation facility. The POI will be identified by street address and Vertical and Horizontal (V & H) Coordinates. This process will continue as Sprint initiates exchange service operations in additional SWBT Exchange Areas;
 - 1.2 Where Sprint requires ancillary services (e.g., Directory Assistance, Operator Services, 911/E911), additional POIs may be required for interconnection to such ancillary services;
 - 1.3 SWBT will interconnect its network facilities with Sprint's facilities under terms and conditions no less favorable than those identified herein.
 - 2.0 Where Sprint interconnects with SWBT for the purpose of exchanging traffic between networks, Sprint may use any of the following interconnection methods, including but not limited to, Physical Collocation Interconnection, Virtual Collocation Interconnection, SONET Based Interconnection, Mid Span Fiber Interconnection, leasing of SWBT facilities or other mutually agreeable method of interconnection. Appendix NIM, attached hereto and incorporated herein, describes such methods.
 - 3.0 In addition, the Parties agree to the interconnection and trunking requirements listed in Appendix ITR, which is attached hereto and made a part hereof.

APPENDIX NETWORK INTERCONNECTION METHODS (NIM)

This Appendix NIM to Attachment 11: Network Interconnection Architecture designates Network Interconnection Methods (NIMs) to be used by the Parties. These include, but are not limited to: MidSpan Fiber Interconnection (MSFI); Virtual Collocation Interconnection; SONET Based Interconnection; Physical Collocation Interconnection; leasing of SWBT facilities; and other methods as mutually agreed to by the Parties.

1. **Mid-Span Fiber Interconnection (MSFI)**

Mid-Span Fiber Interconnection (MSFI) between Southwestern Bell Telephone (SWBT) and Sprint can occur at any mutually agreeable, economically and technically feasible point between Sprint's premises and a SWBT tandem or end office. This interconnection will be on a point-to-point SONET system over single mode fiber optic cable.

MSFI may be used to provide interconnection trunking as defined in Appendix ITR to Attachment 11: Network Interconnection Architecture.

A. There are two basic mid-span interconnection designs:

1. Design One: Sprint's fiber cable and SWBT's fiber cable are connected at an economically and technically feasible point between the Sprint location and the last entrance manhole at the SWBT central office.

The Parties may agree to a location with access to an existing SWBT fiber termination panel. In these cases, the network interconnection point (POI) shall be designated outside of the SWBT building, even though the Sprint fiber may be physically terminated on a fiber termination panel inside of a SWBT building. In this instance, Sprint will not incur fiber termination charges and SWBT will be responsible for connecting the cable to the SWBT facility.

The Parties may agree to a location with access to an existing Sprint fiber termination panel. In these cases, the network interconnection point (POI) shall be designated outside of the Sprint building, even though the SWBT fiber may be physically terminated on a fiber termination panel inside of an Sprint building. In this instance, SWBT will not incur fiber termination charges and Sprint will be responsible for connecting the cable to the Sprint facility.

If a suitable location with an existing fiber termination panel cannot be agreed upon, Sprint and SWBT shall mutually determine provision of a fiber termination panel housed in an outside, above ground, cabinet placed at the physical POI. Ownership and the cost of provisioning the panel will be negotiated between the two parties.

2. Design Two: Sprint will provide fiber cable to the last entrance manhole at the SWBT tandem or end office switch with which Sprint wishes to interconnect. Sprint will provide a sufficient length of fiber optic cable for SWBT to pull the fiber cable to the SWBT cable vault for termination on the SWBT fiber distribution frame (FDF). In this case the POI shall be at the manhole location.

Each Party is responsible for designing, provisioning, ownership and maintenance of all equipment and facilities on its side of the POI. Each Party is free to select the manufacturer of its Fiber Optic Terminal (FOT). Neither Party will be allowed to access the Data Communication Channel (DCC) of the other Party's FOT. The Parties will work cooperatively to achieve equipment compatibility.

- B. The Parties will mutually agree upon the precise terms of each mid-span interconnection facility. These terms will cover the technical details of the interconnection as well as other network interconnection, provisioning and maintenance issues.
- C. The Sprint location includes FOTs, multiplexing and fiber required to take the optical signal handoff from SWBT for interconnection trunking as outlined in Appendix ITR.
- D. The fiber connection point may occur at several locations:
 1. a location with an existing SWBT fiber termination panel. In this situation, the POI shall be outside the SWBT building which houses the fiber termination panel;
 2. a location with access to an existing Sprint fiber termination panel. In these cases, the network interconnection point (POI) shall be designated outside of the Sprint building, even though the SWBT fiber may be physically terminated on a fiber termination panel inside a Sprint building;

3. a location with no existing SWBT fiber termination panel. In this situation, SWBT and Sprint will negotiate provisioning, maintenance and ownership of a fiber termination panel and above ground outside cabinet as a POI and for connection of the fiber cables;
 4. a manhole outside of the SWBT central office. In this situation, Sprint will provide sufficient fiber optic cable for SWBT to pull the cable into the SWBT cable vault for termination on the SWBT FDF. The POI will be at the manhole and SWBT will assume maintenance responsibility for the fiber cabling from the manhole to the FDF.
- E. The SWBT tandem or end office switch includes all SWBT FOT, multiplexing and fiber required to take the optical signal hand-off provided from Sprint for interconnection trunking as outlined in Appendix ITR. This location is SWBT's responsibility to provision and maintain.
- F. In both designs, Sprint and SWBT will mutually agree on the capacity of the FOT(s) to be utilized. The capacity will be based on equivalent DS1s that contain trunks and interLATA traffic. Each Party will also agree upon the optical frequency and wavelength necessary to implement the interconnection. The Parties will develop and agree upon methods for the capacity planning and management for these facilities, terms and conditions for over provisioning facilities, and the necessary processes to implement facilities as indicated below. These methods will meet quality standards as mutually agreed to by Sprint and SWBT.

2. **Avoidance of Over Provisioning**

Underutilization is the inefficient deployment and use of the network due to forecasting a need for more capacity than actual usage requires, and results in unnecessary costs for SONET systems. To avoid over provisioning, the Parties will agree to joint facility growth planning as detailed below.

3. **Joint Facility Growth Planning**

The initial fiber optic system deployed for each interconnection shall be the smallest standard available. For SONET this is an OC-3 system. The following list the criteria and processes needed to satisfy additional capacity requirements beyond the initial system.

A. Criteria:

1. Investment is to be minimized;
2. Facilities are to be deployed in a "just in time" fashion.

B. Processes

1. discussions to provide relief to existing facilities will be triggered when either Party recognizes that the overall system facility (DS1s) is at 90% capacity;
2. both Parties will perform a joint validation to ensure current trunks have not been over-provisioned. If any trunk groups are over-provisioned, trunks will be turned down as appropriate. If any trunk resizing lowers the fill level of the system below 90%, the growth planning process will be suspended and will not be reinitiated until a 90% fill level is achieved. Trunk design blocking criteria described in Appendix ITR will be used in determining trunk group sizing requirements and forecasts;
3. if based on the forecasted equivalent DS1 growth, the existing fiber optic system is not projected to exhaust within one year, the Parties will suspend further relief planning on this interconnection until a date one year prior to the projected exhaust date. If growth patterns change during the suspension period, either Party may re-initiate the joint planning process;
4. if the placement of a minimum size FOT will not provide adequate augmentation capacity for the joint forecast over a two year period, and the forecast appears reasonable based upon history, the next larger system may be deployed. In the case of a SONET system, the OC-3 system could be upgraded to an OC-12. If the forecast does not justify a move to the next larger system, another minimal size system (such as on OC-3) could be placed. This criteria assumes both Parties have adequate fibers for either scenario. If adequate fibers do not exist, both Parties would negotiate placement of additional fibers;
5. both Parties will negotiate a project service date and corresponding work schedule to construct relief facilities in an effort to achieve "just in time" deployment;

6. the joint planning process/negotiations should be completed within two months of identification of 90% fill.

4. **Virtual Collocation Interconnection**

The description of Virtual Collocation Interconnection is contained in SWBT's Virtual Collocation tariffs (i.e., SWBT's Tariff F.C.C. No. 73).

5. **Sonet-Based Interconnection**

The description of SONET-Based Interconnection is contained in SWBT's Sonet-Based Interconnection tariffs (i.e., SWBT's Tariff F.C.C. No. 73).

6. **Physical Collocation Interconnection**

SWBT will provide Physical Collocation Interconnection on nondiscriminatory terms and conditions at the time Sprint requests such interconnection.

7. **Leasing of SWBT's Facilities**

Sprint's leasing of SWBT's facilities for purposes of Attachment 11: Network Interconnection Architecture will be subject to the mutual agreement of the Parties.

APPENDIX INTERCONNECTION TRUNKING REQUIREMENTS (ITR)

1. Introduction

This Appendix Interconnection Trunking Requirements (ITR) to Attachment 11: Network Interconnection Architecture provides descriptions of the trunking requirements for Sprint to interconnect any Sprint provided switching facility with SWBT facilities. The diagrams in Section 6.0 of this Appendix, which are not necessarily all inclusive, depict trunk groups for message network, E911 and Operator Services interconnection. All references to incoming and outgoing trunk groups are from the perspective of Sprint.

If either Party changes the methods by which it trunks and routes traffic within its network, it will afford the other Party the opportunity to trunk and route its traffic in the same manner for purposes of interconnection. The parties agree to offer and provide to each other B8ZS Extended Superframe and/or 64kbps clear channel where it is currently deployed at the time of request.

Within one year of this Agreement, SWBT will allow and use combined local/intraLATA/interLATA trunk groups.

2. Trunk Group Configurations:

2.1 Local Traffic and IntraLATA Interexchange (Toll) Traffic:

2.1.1 Sprint Originating (Sprint to SWBT)

IntraLATA toll traffic may be combined with local traffic on the same trunk group when Sprint routes traffic to either a SWBT access tandem which serves as a combined local and toll tandem or directly to a SWBT end office. When mutually agreed upon traffic data exchange methods are implemented as specified in Section 5.0 of this Appendix, direct trunk group(s) to SWBT end offices will be provisioned as two-way and used as two-way. When there are separate SWBT access and local tandems in an exchange, a separate local trunk group will be provided to the local tandem and a separate intraLATA toll trunk group will be provided to the access tandem. When there are multiple SWBT combined local and toll tandems in an Exchange Area, separate trunk groups will be established to each tandem. Such trunk groups may carry both local and intraLATA toll traffic. Trunk groups to the access or local tandem(s) will be provisioned as two-way and used as one-way until such time as it becomes technically feasible to use two-way trunks in SWBT tandems. Trunks will utilize Signaling System 7 (SS7) protocol signaling when such capabilities exist within the SWBT network. Multifrequency (MF) signaling will be utilized in cases where SWBT switching platforms do not support SS7.

Trunking to a SWBT access tandem will provide Sprint access to the SWBT end offices and NXXs which subtend that tandem and to other service providers which are connected

to SWBT. Trunking to a SWBT end office(s) will provide Sprint access only to the NXXs served by that individual end office(s) to which Sprint interconnects.

2.1.2 Sprint Terminating (SWBT to Sprint):

Where SWBT has a combined local and access tandem, SWBT will combine the local and the IntraLATA toll traffic over a single trunk group to Sprint. The trunk groups will be provisioned as two-way and used as one-way until such time as it becomes technically feasible to use two-way trunks. When SWBT has separate access and local tandems in an exchange area, a separate trunk group will be established from each tandem to Sprint. As noted in Section 2.1.1, direct trunk group(s) between Sprint and SWBT end offices will be provisioned as two-way and used as two-way. Trunks will utilize SS7 protocol signaling unless the SWBT switching platform only supports MF signaling.

2.2 Access Toll Connecting Traffic:

Access Toll Connecting traffic will be transported between the SWBT access tandem and Sprint over a "meet point" trunk group separate from local and intraLATA toll trunk group. This trunk group will be established for the transmission and routing of Exchange Access traffic between Sprint's end users and interexchange carriers via a SWBT access tandem. When SWBT has more than one access tandem within an exchange, Sprint may utilize a single "meet point" access toll connecting trunk group to one SWBT access tandem within the exchange. This trunk group will be set up as two-way and will utilize SS7 protocol signaling. Traffic destined to and from multiple interexchange carriers (IXCs) can be combined on this trunk group. Within one year of this Agreement, SWBT will allow and use combined local/intraLATA/interLATA trunk groups.

2.3 IntraLATA 800:

A separate one-way trunk group from Sprint to SWBT will be required for IntraLATA 800 service when Sprint chooses to handle the 800 database queries from its switch location. Similarly, a separate one-way trunk group from SWBT to Sprint will be required for IntraLATA 800 service when SWBT chooses to handle the 800 database queries from its switch location. The purpose of the separate trunk group is to provide either Party the capability to verify proper billing for intercompany settlement compensation. The trunk group will utilize SS7 protocol signaling.

When either Party chooses not to perform the database queries for IntraLATA 800 traffic, the traffic will be routed over interLATA trunks to the other Party.

2.4 911 Emergency Traffic:

A segregated trunk group will be required to each appropriate E911 tandem within an exchange in which Sprint offers Exchange Service. This trunk group will be set up as a one-way outgoing only and will utilize CAMA/ANI MF signaling.

Where technically feasible and the PSAP customer agrees, B911 traffic will be routed on a dedicated trunk group directly to the SWBT end office that serves the appropriate PSAP. This trunk group will be set up as one-way outgoing only and will utilize CAMA/ANI MF signaling.

2.5 Mass Calling (Public Response Choke Network):

A segregated trunk group will be required to the designated Public Response Choke Network tandem in each serving area in which Sprint provides service pursuant to this Agreement. This trunk group will be one-way outgoing only and will utilize MF signaling. It is anticipated that this group will be sized, according to industry standards and in the same manner that SWBT provides for its own end users, as follows, subject to adjustments from time to time as circumstances require:

< 15001 access Lines (AC)	2 trunks (min)
15001 to 25000 AC	3 trunks
25001 to 50000 AC	4 trunks
50001 to 75000 AC	5 trunks
> 75000 AC	6 trunks (max)

At the time that Sprint establishes a Public Response Choke Network NXX and tandem, SWBT will establish reciprocal mass calling trunks to Sprint subject to the requirements set forth in this Section.

2.6 Operator Services

2.6.1 No Operator Contract

Inward Operator Assistance (Call Code 121) - Sprint may choose from two interconnection options for Inward Operator Assistance.

Option 1 - Interexchange Carrier (IXC)

Sprint may utilize the Interexchange Carrier Network. Sprint will route its calls requiring inward operator assistance through its designated IXC POP to SWBT's TOPS tandem. SWBT will route its calls requiring inward operator assistance to Sprint's Designated Operator Switch (TTC) through the designated IXC POP.

Sprint will use the same OSPS platform to provide local and IXC operator services. Where appropriate, Sprint will utilize existing trunks to the SWBT TOPS platform that are currently used for existing IXC inward operator services.

Option 2 - Sprint Operator Switch

Sprint will identify a switch as the Designated Operator Switch (TTC) for its NPA-NXXs. SWBT will route Sprint's calls requiring inward operator assistance to this switch. This option requires a segregated one-way or two way (with MF signaling) trunk group from SWBT's Access Tandem to the Sprint switch. Sprint calls requiring inward operator assistance will be routed to SWBT's operator over an IXC network.

2.6.2 Operator Contract with SWBT:

a. Directory Assistance (DA):

Sprint may contract for DA services only. A segregated trunk group for these services would be required to SWBT's TOPS tandem. This trunk group is set up as one-way outgoing only and utilizes MF and Operator Services signaling. The traffic use code and modifier for this trunk group should be DAJ (see Option 3).

b. Directory Assistance Call Completion (DACC):

Sprint, when contracting for DA services, may also contract for DACC. This requires a segregated one-way trunk group to SWBT's TOPS tandem. This trunk group is set up as one way outgoing only and utilizes MF signaling. The traffic use code and modifier for this trunk group should be DACCJ (see Option 3).

c. Busy Line Verification:

When SWBT is under contract to verify Sprint's end user loop, SWBT will utilize a segregated one-way trunk group with MF signaling from SWBT's Access Tandem to the Sprint switch. The traffic use code and modifier for this trunk group should be VRJ (See Option 3).

d. Operator Assistance (0+, 0-):

This service requires a one-way trunk group from Sprint's switch to SWBT's TOPS tandem. Two types of trunk groups may be utilized. If the trunk group transports DA/DACC, the trunk group will be designated ETCMFJ (0-, 0+, DA, DACC) (see Option 3). If DA is not required or is transported on a segregated trunk group, then the group will be designated as ETCM2J (see Option 3). MF and Operator Services signaling will be required on the trunk group.

3. **Trunk Design Blocking Criteria**

Trunk forecasting and servicing for the local and intraLATA toll trunk groups will be based on the industry standard objective of 2% overall time consistent average busy season busy hour loads 1% from the End Office to the Tandem and 1% from tandem to

End Office based on Neal Wilkinson B.OIM [Medium Day-to-Day Variation] until traffic data is available which is the same that SWBT uses for their own trunk groups. When data is available and if Sprint requests a better grade of service, SWBT will provide to Sprint if Sprint agrees to pay additional costs for doing so. Listed below are the trunk group types and their objectives:

<u>Trunk Group Type</u>	<u>Blocking Objective (Neal Wilkinson B.01M)</u>
Local Tandem	1%
Local Direct	2%
IntraLATA Interexchange Direct	1 %
IntraLATA Interexchange Tandem	0.5%
911	1 %
Operator Services (DA/DACC)	1 %
Operator Services (0+, 0-)	0.5%
InterLATA Tandem	0.5%

4. **Forecasting/Service Responsibilities**

- 4.1 SWBT and Sprint will be jointly responsible for forecasting and servicing all two-way trunk groups between the two networks. SWBT will be responsible for forecasting and servicing the one-way trunk groups terminating to Sprint. Sprint will be responsible for forecasting and servicing the one-way trunk groups to SWBT including terminating, transit, operator services, directory assistance and E911 trunks. Standard trunk traffic engineering methods will be used as described in Bell Communications Research, Inc. (Bellcore) document SR-TAP-000191, Trunk Traffic Engineering Concepts and Applications or as otherwise mutually agreed to by the Parties.

5. **Service Objective/Data Exchange**

- 5.1 Each Party agrees to service trunk groups to the blocking criteria listed in Section 3. Each party will attempt to service trunk groups in a timely manner when they have sufficient data to determine that the service objectives in Section 3 are not being met.
- 5.2 Each Party will make trunk group blockage information available to the other party by mechanized procedures. The existing exchange of data for Access Trunk Groups will be extended to provide data on all joint trunk groups.
- 5.3 When the traffic between the Parties' end office is forecasted to equal or exceed a DS1, the Parties may mutually agree to establish a direct trunk group.

6. **Interconnection Trunking Diagrams**

The attached diagrams depict the interconnection trunking arrangements described above.